

#AOP-19-030
DEC#SJ96-0053

Operating Permit Expiration Date: March 23, 2026

State of Vermont
Agency of Natural Resources
Department of Environmental Conservation



Air Quality & Climate Division
Montpelier, Vermont

TITLE V
AIR POLLUTION CONTROL PERMIT
TO CONSTRUCT AND OPERATE

Date Permit Issued: March 23, 2021

Owner/Operator: Ethan Allen Operations, Inc.
27 Railroad Avenue
Orleans, Vermont 05860

Source: Wood Furniture Manufacturing Facility
Ethan Allen Operations, Inc.
27 Railroad Avenue
Orleans, Vermont 05860

FINDINGS OF FACT

(A) FACILITY DESCRIPTION

Ethan Allen Operations, Inc. (also referred to herein as "Permittee") owns and operates the Orleans Division that manufactures wood household furniture and furnishings off Railroad Street in the village of Orleans within the town of Barton, Vermont (also referred to herein as "Facility"). Operations at the Facility include: boilers, wood processing operations, rough mill, machining, wood bending, sanding, assembly, finishing of wood products, packing, and shipping.

The Permittee has proposed to limit emissions of Hazardous Air Pollutants (HAPs) to less than the federal major source threshold of ten (10) tons per of any one HAP and twenty-five (25) tons per year of all HAPs combined. In addition, the Permittee had previously requested approval in November of 2001 to equip the Riley boiler #233 with residual oil-firing capability due to a decline in the rough mill operations that generate wood waste for fueling the wood fired boilers at the Facility. The Permittee had requested approval to burn up to 155,000 gallons per year of residual oil. A Permit to Construct and Operate (#AOP-95-110) was issued March 19, 2002 granting this approval but the Permit was subsequently appealed by the Permittee and vacated and remanded back to the Agency by the Environmental Court on April 2, 2003. The Permit herein again grants the approval to burn up to 155,000 gallons per year of residual oil or equivalent BTUs in the Riley #233 boiler. The Permittee has also proposed changes to coating formulations to include water-based coatings in accordance with its letter dated June 12, 2008 to the Agency as well as the addition and reconfiguration of spray booths at the Facility in accordance with prior correspondence. The Ethan Allen Operations, Inc., Orleans Division has requested a flexible air permit (FAP) allowing for alternative operating scenarios (AOS) to be applied to this site to allow for potential process improvements in the future.

Upon issuance of this Permit, the approved regulated operations at the Facility include the following air pollution related operations, equipment, and emission control devices:

Equipment Specifications			
Equipment/Make/Model	Capacity/Size MMBTU/hr (hp)	Fuel Type	Date of Manufacture (installation)
Wickes Boiler with a multicyclone, no reinjection	27.8 / 4369	Wet Wood	1965 Modified: 1985
Riley #233 Boiler with a multicyclone, no reinjection	34.0 / 2670 35.0 / 2670	Dry Wood	1965 Modified: 2002
Riley #234 Boiler with a multicyclone, no reinjection	34.0 / 2670	Dry Wood	1965
Bryan Boiler	2.7	No. 2 Fuel Oil	1973

Equipment Specifications			
Equipment/Make/Model	Capacity/Size MMBTU/hr (hp)	Fuel Type	Date of Manufacture (installation)
Fire Pump, Peerless Pump Division, F.M.C. Corporation Model 8AF25B	255 bhp @ 1750 rpm, 2000 gpm. Fire pump operates on diesel only.	ULSD	1973
Kohler Model 14RESA Standby generator. S/N: 3043962	23.6 bhp @ 3600 rpm	Propane	2012

¹ MMBTU/hr - Million British Thermal Units per hour maximum rated heat input. bhp – brake horsepower rated output as specified by the manufacturer. Gpm – gallons per minute of pumped water. kW – kilowatt electrical output. ULSD – Ultra-low sulfur diesel.

Equipment Specifications - Wood Waste Handling Operations	
Equipment/Make/Model ²	Date of Installation
Unit E Rough Mill: Carter Day #999, Model 232 RF10 <ul style="list-style-type: none"> • Air/cloth ratio of 10:1, Number of bags 232 • Cloth Area = 2960 ft² • ACFM of 30,000, hours of operation 8760 	1987
Unit Da Boiler Room: American Von Tongeren (AVT), Model 100S <ul style="list-style-type: none"> • Air/cloth ratio of 18:1, Number of bags 1008 • Cloth Area = 333 ft² • ACFM of 6,000, hours of operation 8760 	≈ 1973
Unit Db Boiler Room: American Von Tongeren (AVT), Model 100S <ul style="list-style-type: none"> • Air/cloth ratio of 18:1, Number of bags 1008 • Cloth Area = 333 ft² • ACFM of 6,000, hours of operation 8760 	≈1973
Unit #1 Finish Mill/Sanding: MAC #1403, Model 144MCF494 <ul style="list-style-type: none"> • Air/cloth ratio of 7.5:1, Number of bags 494 • Cloth Area = 7163 ft² • ACFM of 54,000, hours of operation 3840 	2000
Unit #2 Finish Mill/Sanding: MAC #1404, Model 144MCF494 <ul style="list-style-type: none"> • Air/cloth ratio of 7.5:1, Number of bags 494 • Cloth Area = 7163 ft²ACFM of 54,000, hours of operation 3840 	2000
Unit #3 Finish Mill/Sanding MAC #1405, Model 144MCF494 <ul style="list-style-type: none"> • Air/cloth ratio of 8.4:1, Number of bags 494 • Cloth Area = 7163 ft² • ACFM of 60,000, hours of operation 3840 	2000
Unit #4 Rough Mill: MAC 1442, Model 144MCF361 <ul style="list-style-type: none"> • Air/cloth ratio of 9.6:1, Number of bags 361 • Cloth Area = 5202 ft² • ACFM of 50,000, hours of operation 3840 	2002

Unit #5 Finish Mill: MAC 1440, Model 144MCF494 <ul style="list-style-type: none"> • Air/cloth ratio of 7:1, Number of bags 494 • Cloth Area = 7118 ft² • ACFM of 50,000, hours of operation 3840 	2002
Chip Feed Cyclone CS <ul style="list-style-type: none"> • Handles green wood woodchips, emissions need not be quantified 	1993
Cyclone RS (Vents to AVT Dust Collector) <ul style="list-style-type: none"> • Closed loop, emissions need not be quantified 	1993
Cyclone FS (Vents to AVT Dust Collector) <ul style="list-style-type: none"> • Closed loop, emissions need not be quantified 	1993
Saw Dust Unloading Systems for silo	2008
Miscellaneous Operations	
Thirty-one (31) spray booths	Various
Glue lines, cold and hot press (wood glues- PVA or Aliphatic) includes Glue Panel Dept and Assembly.	Various

¹ MMBtu/hr - Million British Thermal Units per hour maximum rated heat input. Bhp - brake horse power at rated load and speed. Gpm - gallons per minute of pumped water. kW - kilo Watt electrical output. ULSD - ultra low sulfur diesel.

² ACFM – actual cubic feet per minute.

(B) FACILITY CLASSIFICATION

The Facility is classified as a source of air contaminants pursuant to Title 10 of the *Vermont Statutes Annotated* ("10 VSA") §555 and §5-401(4) [Wood products industries], (6)(a) [Fossil fuel burning equipment greater than 10 million Btus per hour], and (9) [Surface finishing operations, including application of paints lacquers, solvents and related materials] of the *Vermont Air Pollution Control Regulations* (hereinafter "*Regulations*"). In addition, §5-101 of the *Regulations* defines a *stationary source* as any structure(s), equipment, installation(s), or operation(s), or combination thereof, which emit or may emit any air contaminant, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person or persons under common control. Based on this definition, all of the equipment, operations, and structures at the Facility are grouped together by the Agency of Natural Resources, Department of Environmental Conservation, Air Quality & Climate Division (hereinafter "Agency") as one stationary air contaminant source for purposes of review under the *Regulations*.

(C) PRIOR AGENCY ACTIONS/APPROVALS

The Facility has been issued the following "Permit to Construct" approvals pursuant to 10 VSA §556 and §§5-501 and/or 5-502 of the *Regulations* and the following "Permit to Operate" approvals pursuant to 10 VSA §556a and Subchapter X of the *Regulations*.

Prior Agency Permit Approvals and Actions	
Date of Action	Description of Agency Approval/Action
July 7, 1985	Original Agency "Permit to Construct" approval for conversion of the Wickes boiler to wood fuel and installation of multiple cyclones on existing two Riley wood-fired boilers.
January 13, 1993	#AP-92-024 – Construction permit approving the installation of 2 additional spray booths to supplement existing spray finishing operations.
March 10, 1993	#AP-92-024a – Amendment approval to install a single spray booth for the repair area.
April 19, 1993	#AP-92-024b – Amendment approval to install three additional spray booths.
November 1, 1999	#AP-92-024c – Amendment approval for the use of pre-catalyzed low formaldehyde coatings (<0.01%) in existing finishing operations.
August 14, 2000	#AP-92-024d – Amendment approval to replace two existing fabric filter collectors with three new large systems.
August 8, 2001	#AP-92-024e – Amendment for approval to install two replacement (MAC) fabric filters for a Carter-Day (Model 144RJ120) and homemade Shaker unit. Replaced two twenty thousand gallon tanks, and installed one fifteen thousand gallon tank in their place.
March 19, 2002	#AOP-95-110 – The Permittee requested to burn oil in the Riley wood waste boiler (#233) and initial permit to operate was issued, but subsequently remanded by the Court on April 2, 2003.
May 11, 2015	#AOP-04-004 – Amendment approval to burn up to 155,000 gallons of No.2 fuel oil in the Riley boiler and an increase in allowable HAP emissions to 10 tons per year for any one HAP and twenty-five tons per year of all HAPs combined.

(D) FACILITY PERMIT APPLICABILITY

As noted above, the Facility is classified as a source of air contaminants under §5-401 of the *Regulations*. Pursuant to 10 VSA §556a and Subchapter X of the *Regulations* a Permit to Operate is required for any air contaminant source with allowable emissions of all air contaminants combined of ten (10) tons per year ("tpy") or more or that is otherwise subject to Title 40 *Code of Federal Regulations* ("40 CFR") Part 70.

Allowable emissions from the Facility are estimated to be greater than the ten (10) tpy combined threshold for applicability with Subchapter X of the *Regulations*, and emissions of particulate matter (PM/PM₁₀), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC) are estimated to be in excess of the one-hundred (100) tpy threshold (50 tpy for VOC) for applicability to Title V of the federal Clean Air Act.

Therefore, pursuant to §§5-1002, 5-1003, and 5-1005 of the *Regulations* the Facility is classified as a "Title V Subject Source" and must obtain a Permit to Operate consistent with the requirements of Subchapter X of the *Regulations* and Title 40 *Code of Federal Regulations* ("40 CFR") Part 70.

In accordance with 10 VSA §556(e) the Agency has combined the previous Permit to Construct and the Permit to Operate renewal for this Facility into one combined Permit to Construct and Operate. The allowable emissions for the Facility are summarized below:

Allowable Air Contaminant Emissions (tons/year)¹					
PM/PM₁₀/PM_{2.5}	CO	NO_x	SO₂	VOCs	HAPs
432/73/38	274.9	<100	11.4	<314	<10/25

¹ PM/PM₁₀/PM_{2.5} – total particulate matter, total particulate matter of 10 micrometers in size or smaller and total particulate matter of 2.5 micrometers in size or smaller, respectively. Unless otherwise specified, all PM is assumed to be PM_{2.5}; SO₂ - sulfur dioxide; NO_x - oxides of nitrogen measured as NO₂ equivalent; CO - carbon monoxide; VOCs - volatile organic compounds; HAPs - hazardous air pollutants as defined in §112 of the federal Clean Air Act.

(E) REVIEW OF CRITERIA POLLUTANT EMISSIONS FOR THE PERMIT TO CONSTRUCT

(a) New Source Review Designation

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the New Source Review requirements in §5-501 or §5-502 of the *Regulations* at this time.

(b) Most Stringent Emission Rate

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to review under the MSER requirements in §5-502 of the *Regulations* at this time. In addition, there have been no prior MSER evaluations conducted for any of the previous modifications to the Facility.

(c) Ambient Air Quality Impact Evaluation

An ambient air quality impact evaluation for criteria pollutants is performed to demonstrate whether or not a proposed project will cause or contribute to violations of the national ambient air quality standards and/or significantly deteriorate existing air quality for the regulated criteria pollutants.

The Permittee has not proposed any modifications to the Facility in conjunction with the review for this Permit to Operate and therefore is not subject to an air quality impact analysis under §5-501 of the *Regulations* at this time. In addition, there have been no prior ambient air quality impact evaluations conducted for any of the previous modifications to the Facility.

(F) REVIEW OF CRITERIA POLLUTANT EMISSIONS FOR THE PERMIT TO OPERATE

(a) Applicable Requirements

The operations at the Facility are subject to the following state and federal laws and regulations, the requirements of which are embodied in the conditions of this Permit.

(i) *Vermont Air Pollution Control Regulations:*

Applicable Requirements from the Vermont Air Pollution Control Regulations
Section 5-201 – Prohibition of Open Burning
Section 5-211(1) - Prohibition of Visible Air Contaminants, Installations Constructed Prior to April 30, 1970.
Section 5-211(2) - Prohibition of Visible Air Contaminants, Installations Constructed Subsequent to April 30, 1970.
Section 5-221(1) - Prohibition of Potentially Polluting Materials in Fuel, Sulfur Limitation in Fuel.
Section 5-231(1) - Prohibition of Particulate Matter; Industrial Process Emissions.
Section 5-231(3) - Prohibition of Particulate Matter; Combustion Contaminants.
Section 5-231(4) - Prohibition of Particulate Matter; Fugitive Particulate Matter.
Section 5-241 – Prohibition of Nuisance and Odor.
Section 5-253.8 – Industrial Adhesives. <i>The Permittee has stated that all adhesives, and sealants used at the Facility are less than the 20 grams of VOC per liter exemption level of 5-253.8(a)(2)(ii)(B) and thus this regulation is not applicable. The Permittee shall keep monthly records documenting this.</i>
Section 5-253.16 - Wood Furniture Manufacturing. <i>This Regulation combines the federal MACT requirements of 40 CFR Part JJ and the Control Techniques Guideline for Wood Furniture Manufacturing. The rule was adopted on August 14, 2003 and became effective March 1, 2004.¹</i>
Section 5-261(2) – Control of Hazardous Air Contaminants - Hazardous Most Stringent Emission Rate.
Section 5-402 – Written Reports When Requested.

Applicable Requirements from the Vermont Air Pollution Control Regulations
Section 5-403 – Circumvention.
Section 5-404 – Methods for Sampling and Testing of Sources.
Subchapter VIII – Registration of Air Contaminant Sources.
Subchapter X – Operating Permits.

¹ With the exception of subsection 5-253.16(c)(2), (c)(3), (c)(4), (d)(5), (3)(3) or (f)(2), this regulation was adopted by the EPA as part of the Vermont State Implementation Plan on 07/91/2011 (see FR 42560).

(ii) Reasonably Available Control Technology - §5-1010 of the *Regulations*

Pursuant to 10 VSA §556a(d) and §5-1010 of the *Regulations* the Agency may establish and include within any Permit to Operate emission control requirements based on Reasonably Available Control Technology ("RACT"). Based on the Facility's existing levels of emissions and emission controls, the Agency has not imposed any further requirements on this Facility under this authority at this time.

(iii) Existing Air Pollution Control Permit to Construct and/or Operate

The Facility currently operates under the confines of a Permit to Construct issued on May 11, 2015 (#AOP-04-004). The conditions within that existing permit are considered applicable requirements pursuant to §5-1002 of the *Regulations*. The requirements of that permit which are not being modified herein are incorporated into this new combined Permit to Construct and Operate (#AOP-19-030).

(iv) Federal Requirements:

Applicable Requirements from Federal Regulations and the Clean Air Act
40 <i>CFR</i> Part 63, Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations: §63.802 Emission limits; §63.803 Work practice Standards; §63.806 Recordkeeping requirements; §63.807 Reporting requirements. Applicable to all facilities engaged in the manufacture of wood furniture and that were major HAP sources on the final compliance date specified in Subpart JJ.
<i>The Facility has an enforceable HAP emission limit of 10/25 tons/year and is now an area source for HAPs. This Facility is no longer subject to the requirements of 40 CFR Part 63, Subpart JJ.</i>

Applicable Requirements from Federal Regulations and the Clean Air Act
<p>40 <i>CFR</i> Part 63, Subpart JJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers. Applies to new and existing fuel oil and solid fuel fired boilers located at area sources (major sources are subject to Subpart DDDDD). Natural gas or propane fired boilers are not subject. This gas exemption allows use of backup fuel during gas curtailments and up to 48 hours of elective use. Oil fired hot water boilers less than 1.6 MMBTU/hr are not subject. The rule requires a tune-up for each boiler once every two years except boilers with oxygen trim and oil boilers less than 5 MMBTU/hr must conduct tune-ups every five years. New boilers greater than 10 MMBTU/hr are subject to PM emission limits. Boilers that commenced construction on or before June 4, 2010 are considered an existing source.</p> <p><i>Subpart JJJJJ applies to the all boilers at the Facility. Permittee submitted initial notification September 13, 2011, and Notification of compliance status on June 26, 2014. Since the Facility is not a major source of HAPs, the Facility is not subject to Subpart DDDDD.</i></p>
<p>40 <i>CFR</i> Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. Applies to <u>new</u> engines that commenced construction (installed) on or after June 12, 2006 at area sources of HAPs. Requires such engines to comply with NSPS Subpart IIII or JJJJ, as applicable. Also applies to <u>existing</u> engines that commenced construction (installed) prior to June 12, 2006 at area sources of HAPs. By May 3, 2013 requires engines equal and greater than 300 bhp to meet CO emission standards which may necessitate catalytic controls, must install crankcase ventilation system, and requires ULSD fuel. Engines <300 bhp need only meet maintenance requirements including changing oil & filter and, inspecting and replacing if necessary, air filter, hoses and belts. <u>Does not apply to existing emergency units at an area source residential/commercial/institutional facilities unless they are enrolled in demand response programs.</u> Subject emergency units are subject to maintenance requirements, must install an elapsed hour meter and must use ULSD commencing January 1, 2015 if used for DR.</p> <p><i>Vermont has authority of this regulation for Title V permits. Subpart ZZZZ applies to the emergency fire pump engine at this Facility requiring compliance with the maintenance requirements only.</i></p>
<p>40 <i>CFR</i> Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. Applies to new spark ignition engines installed after June 12, 2006.</p> <p><i>Vermont has authority of this regulation for Title V permits. Subpart JJJJ applies to the propane-fueled Kohler standby generator at the Facility.</i></p>
<p>40 <i>CFR</i> Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial- Institutional Steam Boiler Units: §60.42c Standards for sulfur dioxide; §60.43c Standards for particulate matter; §60.48c Reporting and recordkeeping requirements. Applicable to all boilers 10 MMBTU per hour or greater manufactured or modified after June 9, 1989. Units larger than 30 MMBTU per hour installed after February 27, 2005 are subject to additional particulate matter requirements.</p> <p><i>Vermont has authority of this Regulation for Title V permits. Subpart Dc does not apply to the boilers at the Facility because they are only permitted to burn wood fuel. The Riley boiler #233 is no longer permitted to burn No. 4 fuel oil</i></p>

**Applicable Requirements from
Federal Regulations and the Clean Air Act**

Clean Air Act §§114(a)(3) Inspections, Monitoring and Entry; 502(b) Permit Programs; and 504(a)-(c) Permit Requirements and Conditions; 40 *CFR Part 64* Compliance Assurance Monitoring; 40 *CFR Part 70* §§70.6(a)(3)(i)(B) and 70.6(c)(1) State Operating Permit Programs - Permit content. Upon renewal of a Title V Permit to Operate, a facility must comply with enhanced monitoring and compliance assurance monitoring requirements if applicable. the CAM rule applies to each Pollutant Specific Emission Unit (PSEU) at a major source that is required to obtain a part 70 or part 71 permit if the unit satisfies all of the following criteria: **1)** The unit is subject to an emission limitation or standard for the applicable regulated air pollutant other than an emissions limitation or standard that is exempt under §64.2(b)(1) [exempt limitations include emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to Section 111 or 112 of the Act], **2)** The unit uses a control device to achieve compliance with any such limit or standard; and **3)** The unit has pre-control device emissions of the applicable regulated pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

The woodworking operations used to process kiln-dried wood at the Facility are considered to be emission units. These operations have their PM emissions controlled by either fabric fillers and/or cyclones and are subject to PM emission limits. None of these units are projected to have uncontrolled emissions of PM10 or PM2.5 above 100 tons per year. Therefore the facility is not subject to the CAM requirements.

Clean Air Act §112r Prevention of Accidental Release; 40 *CFR Part 68* Chemical Accident Prevention Programs. Facilities that have more than the threshold quantity of a regulated substance in a process are subject to these provisions including the requirements to conduct a hazard assessment, establish a prevention program and develop a risk management plan.

The Permittee has stated that the Facility does not have more than the threshold quantity of a regulated substance and thus is not subject to these requirements.

Clean Air Act §608 National recycling and emission reduction program; 40 *CFR Part 82*, Protection of Stratospheric Ozone, Subpart F – Recycling and Emissions Reductions. These requirements are applicable to any facility that owns, services, maintains, repairs, and disposes of appliances containing ozone depleting substances. Requirements of the regulation include, but are not limited to:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 *CFR Part 82*, Subpart F §82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment as specified in 40 *CFR Part 82*, Subpart F §82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program as specified in 40 *CFR Part 82*, Subpart F §82.161.
- (d) Commercial or industrial process refrigeration equipment must comply with the leak repair requirements specified in 40 *CFR Part 82*, Subpart F §82.156.
- (e) For each appliance normally containing fifty (50) or more pounds of refrigerant, the Permittee shall keep records of refrigerant purchased and added to such appliances as specified in 40 *CFR Part 82*, Subpart F §82.166.

Vermont has authority of this Regulation for Title V permits The Facility has subject equipment or operations applicable to this regulation.

(b) Non-Applicable Requirements

Pursuant to §5-1015(a)(14) of the *Regulations*, an owner or operator of a facility may request a Permit Shield from specific state or federally enforceable regulations and standards which are not applicable to the source. The Permittee has requested and is hereby granted a permit shield. The permit shield applies to the Facility based on the equipment identified in Findings of Fact A in as long as the Permittee operates in accordance with the information contained within this permit.

(c) Enforceability

This section delineates which permit conditions are federally enforceable and which conditions are state only enforceable. All federal enforceable conditions are subject to federal citizen suit provisions. All conditions of this Permit are enforceable by both state and federal authorities with the exception of those conditions related to annual registration pursuant to §§5-807 and 5-808 of the *Regulations* as well as those conditions based on §§5-253.16(c)(2), (c)(3), (c)(4), (d)(5), (3)(3), (f)(2), and 5-261(2) of the *Regulations*.

(d) Compliance Certification

The Permittee is required by this Permit to certify compliance as part of its annual registration with the Agency pursuant to the requirements of Subchapter X of the *Regulations*. Additionally, this Permit requires the submission of semi-annual reports of monitoring records used to demonstrate compliance with the limitations contained in this Permit.

(G) CONTROL OF HAZARDOUS AIR CONTAMINANTS

Pursuant to §5-261 of the *Regulations*, any stationary source whose current or proposed actual emission rate of a hazardous air contaminant ("HAC") is equal to or greater than the respective Action Level (found in Appendix C of the *Regulations*) shall achieve the Hazardous Most Stringent Emission Rate ("HMSEER") for the respective HAC. Pursuant to §5-261(1)(b)(ii) of the *Regulations*, all fuel burning equipment which combusts virgin liquid or gaseous fuel is exempt from this section. However, based on the 2014 through 2018 registration data, emissions of the following compounds from the finishing operations at the Facility have exceeded their respective Action Levels at one time or more over the past several years and are now being reviewed under §5-261:

- Crystalline silica (14808-60-7)
- Methyl Amyl Ketone (110-43-0)
- isobutyl acetate (110-19-0)
- n-butyl acetate (123-86-4)
- isobutyl alcohol (78-83-1)
- Ethyl Alcohol (64-17-5)

- Acetone (67-64-1)
- 1-butoxy-2-propanol (synonym butyl propasol) (5131-66-8)
- Titanium Dioxide (13463-67-7)
- Isobutyl Ester Isobutyric Acid (97-85-8)

The Permittee has made substantial efforts over the past several years to reduce emissions of state HACs, federal HAPs, and VOCs through the following measures: (1) coating reformulations to reduce VOCs and TRI (Toxic Release Inventory under SARA Title III) reportable toxic compounds and thus replace more toxic HACs and HAPs with less toxic compounds; (2) continued reformulation of coatings containing Category 1 HACs with acetone or other low toxicity and low or no VOC compounds where feasible; (3) use of high solids "hot spray" coatings (sealer 3.8 lbs VOC/gal; topcoat 4.8 lbs VOC/gal) in place of the previous conventional pre-catalyzed coatings (sealer 4.0 - 4.3 lbs VOC/gal; topcoat 3.6 - 6.0 lbs VOC/gal). The high solid hot spray coatings use heat to increase viscosity of higher solids coatings with less solvent. Due to the increased solids content, these coatings also attain the necessary film build thickness with two coats instead of the previous standard of three coats; and (4) the installation of the UV flat-line roll-coat finishing system at the Beecher Falls facility, that also serves the Orleans facility, that uses 100% solids (solvent free) coatings where highest quality finishes are not necessary such as drawer bottoms and backs, and (5) the use of water-based finishes.

Emissions of silica are also reduced by measures that decrease coating usage such as HVLP spray guns, high solids coatings and UV coating applications. In addition, overspray filters are used to capture a minimum of 95% of the overspray in the exhaust air. It should also be noted that the silica in the coatings is not emitted with the hazardous properties of free crystalline silica since it is encapsulated in the overspray coatings.

The Agency has determined that the Permittee is achieving HMSER for the respective HACs through implementation of the above noted emission reduction measures along with continued compliance with §5-253.16 of the Regulations and a cap on annual emissions of each HAC. In addition, the Permittee will be required to continue to investigate reformulation and coating options to minimize all HAC emissions which are in excess of their respective Action Level with the emphasis on minimizing those HACs with the lowest respective Action Levels (i.e. higher toxicity) and shall submit a report to the Agency annually detailing its findings.

This HMSER evaluation shall be subject to re-evaluation five (5) years from the date of its determination and shall remain in effect until revised by the Agency. This and prior HMSER determinations for this Facility are presented below.

In addition, the Facility was previously reviewed under §5-261 of the *Regulations* for modifications to the Facility approved November 1, 1999. The modifications to the Facility included the proposed use of pre-catalyzed coatings. The modification was determined to result in an exceedance of the Action Level for the HAC formaldehyde. The HMSER determinations are presented below:

Hazardous Most Stringent Emission Rate Determinations		
Date of Determination/ Permit #	Pollutant	Description/Emission limit
#AP-92-024c Superseded below by: (#AOP-04-004)	Formaldehyde	Approval for the use of up to 55,000 gallons per year of pre-catalyzed coatings at the Facility resulted in emissions of the air contaminant. MSER limits free formaldehyde content of pre-catalyzed coatings to a maximum of 0.01% by weight, as applied. Emissions of formaldehyde from these coatings shall not exceed a combined emission rate of 0.043 lbs/8hours on an "annual average" basis, calculated assuming 100% of the free formaldehyde in the respective coating is emitted.
(#AOP-04-004) Superseded below by: (#AOP-19-030)	Crystalline Silica Methyl Amyl Ketone N-Butyl Acetate Isobutyl Acetate Isobutyl Alcohol Ethyl Alcohol Acetone 1-butoxy-2-propanol 1-2-4-Trimethyl- Benzene Titanium Dioxide Isobutyl Ester Isobutyric Acid	Based on 2013 registration data: Use of HVLP spray to minimize over spray and use of over spray filters with a minimum ninety-five (95) percent collection efficiency. Crystalline silica emissions shall not exceed 30 lbs/yr (1) continued coating reformulations to reduce more toxic HACs and HAPs with less toxic compounds; (2) continued reformulation with acetone or other low toxicity and low or no VOC compounds where feasible; (3) use of HVLP spray guns where feasible; (4) use of high solids "hot spray" coatings where feasible; (5) use of the UV flat-line roll-coat finishing system where feasible; (6) continue to comply with §5-253.16 of the Regulations, (7) individual HAC caps, in pounds per year (see permit condition (38) below).

<p>(#AOP-19-030)</p>	<p>Crystalline silica Methyl Amyl Ketone isobutyl acetate n-butyl acetate isobutyl alcohol Ethyl Alcohol Acetone 1-butoxy-2-propanol Titanium Dioxide Isobutyl Ester Isobutyric Acid</p>	<p>Based on 2018 registration data: Use of HVLP spray to minimize over spray and use of over spray filters with a minimum ninety-five (95) percent collection efficiency. Crystalline silica emissions shall not exceed 30 lbs/yr (1) continued coating reformulations to reduce more toxic HACs and HAPs with less toxic compounds; (2) continued reformulation of coating containing Category 1 HACs with acetone or other low toxicity and low or no VOC compounds where feasible; (3) use of high solids "hot spray" coatings where feasible; (4) use of the UV flat-line roll-coat finishing system where feasible; (5) continue to comply with §5-253.16 of the Regulations, (6) individual HAC caps, in pounds per year (see permit condition (38) below).</p>
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As the Agency has determined that the Facility, following imposition of HMSEER as noted above, may continue to have estimated emissions of several Hazardous Air Contaminants in excess of their respective Action Level, the Agency has considered whether or not an Air Quality Impact Evaluation should be required pursuant to §5-261(3) of the *Regulations*. The Agency has reviewed several factors relating to this Facility, including, but not limited to those listed in §5-261(3)(a)-(c) of the *Regulations* and the level of emissions and emission reduction measures typical for this category of emission source. Based on this review, the Agency is not requiring the Facility to conduct an air quality impact evaluation pursuant to §5-261(3) of the *Regulations* at this time.

Based on the Agency's review of the Facility's application and the above Findings of Fact, the Agency concludes that the Facility, subject to the following Permit conditions, complies with all applicable state and federal air pollution control laws and regulations or is subject to an acceptable schedule of compliance. Therefore, pursuant to 10 VSA §§556 and 556a, as amended, the Agency hereby issues a Permit approving the Facility, as described in the above Findings of Fact, subject to the following:

PERMIT CONDITIONS

- Construction and Equipment Specifications -

- (1) The Permittee shall construct and operate the Facility in accordance with the plans and specifications submitted to the Agency and in accordance with the conditions set forth herein, including the equipment specifications as listed in Findings of Fact (A) or their equivalent as approved by the Agency. [10 V.S.A. §§556(c) and 556a(d)] [§5-409 and 5-501(1) of the *Regulations*]
- (2) The Permittee shall control particulate matter emissions from the Wickes boiler, and the two Riley boilers by installing and operating multiple cyclone fly-ash collectors of the specifications indicated in its application, or an equivalent device capable of achieving similar emission reductions if approved in writing by the Agency. All elements of these air pollution control systems shall be maintained in good working order at all times and operated in accordance with the manufacturer's operation and maintenance recommendations. Each air pollution control system shall be in operation whenever the respective emission source it serves is in operation. [10 V.S.A. §§556(c) and 556a(d)] [§5-502(4) of the *Regulations*] [Application for #AOP-95-110]
- (3) Wood Waste Dust Collection Systems: The Permittee shall control emissions of particulate matter from the following wood waste handling operations with the respective emission control device having the specifications, including total air flow to the device and with regards to fabric filter devices the stated air to cloth ratio, as listed in Findings of Fact (A), or an equivalent device capable of achieving equivalent emission reductions if approved in writing by the Agency.

Each fabric filter emission control systems shall be maintained in good working order at all times and operated in accordance with the manufacturer's operation and maintenance recommendations. Each air pollution control system shall be in operation whenever the respective emission source is in operation. [10 V.S.A. §§556(c) and 556a(d)] [§§5-231 and 5-1015(a)(1), (3) and (4) of the *Regulations*]

- (4) Wood Waste Dust Collection System: Each fabric filter collector shall be equipped with a pressure drop measurement device which continuously measures and displays the pressure drop across the fabric filter collector (e.g., manometer or magnehelic). All elements of these fabric filters, including their pressure drop measurement device, shall be maintained in good working order at all times and shall be operated in accordance with the manufacturer's operation and maintenance recommendations. Each fabric filter shall be in operation whenever the respective emission source(s) it serves are in operation. The Permittee shall use the pressure drop measurement device to maintain the pressure drop across each fabric filter within acceptable ranges as specified by the manufacturer. Failures due to harsh weather conditions not reasonably preventable by the Permittee shall not be considered a violation of the Permit. [10 V.S.A. §§556(c) and 556a(d)] [§5-1015(a)(1), (3) and (4) of the *Regulations*]
- (5) Spray Booths: The Permittee shall equip each spray booth with filters designed to effectively capture and control a minimum of ninety-five (95) percent of the overspray solids in the exhaust from the spray finishing operations. [10 V.S.A. §§556(c) and 556a(d)] [§§5-261(3) and 5-1015(a)(1) of the *Regulations*]
- (6) Stack heights: The exhaust gases from the Wickes, Riley #233, and Riley #234 Boiler, shall be vented vertically through a stack or stacks which extends a minimum of seventy-two (72) feet above the stack base grade elevation. The stacks shall not be equipped with any device that may obstruct the upward discharge of the exhaust gases such as a fixed rain cap of a type that has not been approved by the Agency.

For all other non-fugitive emission points at the Facility, the Agency recommends that they each be exhausted vertically through a stack(s) which extend a minimum of four (4) feet above the roof where the stack penetrates the roof and that they not be equipped with any device that may obstruct the upward discharge of the exhaust gases such as a fixed rain cap of a type that has not been approved by the Agency. The Agency may require the Permittee to increase the stack height, remove a rain cap, or conduct a dispersion analysis to verify compliance with ambient air quality standards for any stack at the Facility if, in the judgment of the Agency, adequate dispersion cannot be maintained at the current stack configuration. Adequacy may in part be based on the actual emission rate of air contaminants, the characteristics of the current stack configuration, or inspections of the Facility that indicate poor dispersion or that confirm significant visible emissions or nuisance or odor beyond the property line. [10 V.S.A. §§556(c) and 556a(d)] [§5-406 of the *Regulations*] [Application for #AOP-18-000]

- Operational Limitations -

- (7) In order to maintain emissions of nitrogen oxides (NO_x) below the one hundred (100) tons per year threshold of §5-251(2), the Permittee shall not burn fuel in all boilers combined located at its Facility in quantities greater than the following limit during any rolling twelve (12) consecutive calendar month period:

$$0.020 * X + 1.94 * Y + 7.45 * Z < 200,000$$

where:

X = quantity of No.2 burned in units of gallons;

Y = quantity of wet wood fuel burned in units of tons (as fired, including moisture). Wet wood fuel shall be defined as wood fuel with a moisture content of 20% by weight or greater on a green basis.

Z = quantity of dry wood fuel burned in units of tons (as fired, including moisture). Dry wood fuel shall be defined as wood fuel with a moisture content of less than 20% by weight on a green basis.

The NO_x emission rates of 1.94 lbs per ton of wet wood and 7.45 lbs per ton of dry wood in the above formula may be revised by the Agency based on the results of any stack emission testing on the Facility boilers or other credible emission data as approved by the Agency. [10 V.S.A. §§556(c) and 556a(d)] [§5-251(2) of the *Regulations*]

- (8) The annual fuel oil consumption at the Facility for all fuel-oil burning equipment shall not exceed a combined 155,000 gallons per year based upon any rolling twelve (12) consecutive calendar month period. [10 V.S.A. §§556(c) and 556a(d)] [Application for AOP-95-110]
- (9) The sulfur content of No.2 and lighter distillate oils shall not exceed 0.0015 percent by weight. [10 V.S.A. §§556(c) and 556a(d)] [§§5-501 and 5-1015(a)(1) of the *Regulations*] [§5-221(1)(a) of the *Regulations*]
- (10) Particulate Matter [Wood Waste Dust Collection Systems]: The Facility shall not discharge exhaust from each of the five MAC fabric filter collectors to the ambient air in excess of 3,840 hours per year. Hours of operation in which there are not emissions occurring from the fabric filter collectors, such as if the system is being run to prevent freezing of equipment, shall not be included in the total. [10 V.S.A. §556(c)] [Application for #AP-92-024e]
- (11) Wood Boiler: The Permittee shall operate the wood fired boilers at optimum combustion efficiency by, at a minimum, ensuring the proper amounts of combustion air are continuously provided to the boilers and by operating the boilers in accordance with the O&M Plan required by this Permit. The Permittee shall also assure that at least one employee who has received instruction in the proper operation and monitoring of the boilers to achieve optimum combustion efficiency is present or on call whenever one or more of the wood fired boilers are in operation. [10 V.S.A. §§556(c) and 556a(d)] [§5-1015(a)(3) and (4) of the *Regulations*]

- (12) Wood Fuel: Only natural wood as defined in the *Regulations*, as well as sawdust or other wood waste generated by wood processing operations, may be used as fuel in the wood fuel burning equipment without the prior written approval of the Agency. In addition, the wood fuel burning equipment shall only be used when there is a need for space or process heat and shall not be used as an *incinerator* where the primary purpose is the reduction in volume and/or weight of an unwanted material. [10 V.S.A. §§556(c) and 556a(d)] [§§5-101, 5-231(2) and 5-1015(a)(1) of the *Regulations*]
- (13) In accordance with 40 *CFR* Part 63 Subpart JJJJJJ (National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers at area sources), the Permittee shall comply with the following requirements, as applicable, for coal, oil and wood fired boilers as well as all other applicable requirements of this regulation.
- (a) Biennial tune-ups of the boiler(s) as required by 40 *CFR* §63.11223. For boilers installed prior to June 4, 2010 the first tune-up was required by March 21, 2014. Subsequent tune-ups must be completed no later than 25 months after the prior tune-up.
- (b) Notification, reporting and recordkeeping requirements as specified in §63.11225. This includes:
- (i) §63.11225(b): Annual Compliance Certification:
- a. By March 1 of each year, prepare, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year. For boilers that are subject only to a requirement to conduct a biennial or 5-year tune-up and are not subject to emission limits or operating limits, Permittee may prepare only a biennial or 5-year compliance report.
- [40 *CFR* Part 63 Subpart JJJJJJ] [40 *CFR* Part 63]
- (14) Pre-catalyzed type coatings (sealers and lacquers):
- (a) The Permittee may only use pre-catalyzed coatings that have a free formaldehyde content not to exceed 0.01% by weight, as applied.
- (b) The annual usage of pre-catalyzed coatings shall not exceed a combined 55,000 gallons per year.
- (c) The annual average emission rate of formaldehyde from pre-catalyzed coatings shall not to exceed 0.043 pounds per eight hours.

[§5-261(2) of the *Regulations*] [Application for #AP-92-024c]

- (15) Generators/Engines: The Permittee shall not install or operate a stationary reciprocating internal combustion engine, as defined in the Regulations, unless the engine complies with §5-271 of the Regulations as may be applicable as well as any federal regulations including NSPS Subpart IIII and NESHAP ZZZZ, as may be applicable. All engines, including generators/engines, installed on or after July 1, 2007 must comply with the applicable emission standards (Tier 2) of §5-271 immediately upon installation. Installation of any size engine, even those below 450 bhp, may still require approval from the Agency in the form of an amended permit prior to installation. Stationary reciprocating internal combustion engines include those used to power electric generator sets or to provide shaft power for other equipment such as compressors but does not include engines used to power motor vehicles. [§§5-271 and 5-501 of the *Regulations*] [40 CFR Part 60 Subpart IIII and Part 63 Subpart ZZZZ]
- (16) Generators/Spark Ignition: The Permittee shall not install or operate a stationary spark ignition reciprocating internal combustion engine, as defined in the Regulations, unless the engine complies with §5-271 of the Regulations as may be applicable as well as any federal regulations including NSPS Subpart JJJJ, as may be applicable. The Permittee must comply by purchasing an engine certified to the emission standards, as applicable, for the same engine class and maximum engine power. The Permittee must meet the requirements as specified in 40 CFR Part 1068, Subparts A through D, as they apply. [10 V.S.A. §§556(c) and 556a(d)] [§§5-401(6)(c) and 5-501 of the *Regulations*] [40 CFR Part 60, Subpart JJJJ]
- (17) Emergency Generators/Engines: The stationary emergency fire pump engine and Kohler standby generator shall be used only for emergency purposes and up to 100 hours per year for routine testing and maintenance. Emergency purposes are limited to periods of time when:
- (a) The usual source of power, heat or lighting is temporarily unavailable due to reasons beyond the reasonable control of the owner/operator;
 - (b) The Independent System Operator has determined a power capacity deficiency exists and has implemented a voltage reduction of five (5) percent or more of normal operating voltage; or
 - (c) A fire or flood makes it necessary to pump water to minimize property damage.

In the event the Permittee must take action to restore the normal power source, the Permittee must take such action in a reasonable period of time. Emergency engines shall not be operated as part of any other ISO or utility peaking or load shedding activities without the approval of the Agency. The definition of emergency use for applicability to federal regulations NSPS Subpart IIII and NESHAP Subpart ZZZZ may be different and the Permittee should consult those regulations directly for applicability to those respective regulations. [10 V.S.A. §§556(c) and 556a(d)] [§§5-401(6)(c) and 5-501 of the *Regulations*]

- (18) Open Burning: The Permittee shall burn only natural wood in any open burn pile and shall only burn in accordance with this Permit and the *Regulations*. For the purposes of this Permit, natural wood shall be defined as trees, including logs, boles, trunks, branches, limbs, and stumps, lumber including timber, logs or slabs, especially when dressed for use. This definition shall also include pallets which are used for the shipment of various materials so long as such pallets are not chemically treated with any preservative, paint, or oil. This definition shall not extend to other wood products such as sawdust, plywood, particle board and press board. Prior to conducting any open burning of natural wood, other than leaves, brush, or tree cuttings from normal grounds maintenance, the Permittee shall notify the Air Pollution Control Officer and shall obtain approval from the Air Pollution Control Officer to conduct open burning at the Facility. [§5-202 of the *Regulations*]

[From Wood Furniture Manufacturing Rule]

- (19) Work Practice Implementation Plan: In accordance with §5-253.16(d)(1) of the *Regulations*, the Permittee shall prepare, maintain and adhere to a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and for all other finishing, gluing, cleaning and wash-off operations at the source and addresses each of the work practice standards presented in §5-253.16(d)(2) through (11) of the *Regulations*. [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]
- (20) Operator Training Course: In accordance with §5-253.16(d)(2) of the *Regulations*, the Permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and wash-off operations or implementation of the requirements of this rule. All new personnel shall be trained upon hiring. All personnel shall be given refresher training annually. The owner or operator shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:
- (a) A list of all current personnel by name and job description that are required to be trained;
 - (b) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
 - (c) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and wash-off procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
 - (d) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.

[10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]

- (21) Inspection and Maintenance Plan: In accordance with §5-253.16(d)(3) of the *Regulations*, the Permittee shall prepare, maintain and adhere to a written equipment leak inspection and maintenance plan that specifies:
- (a) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic solvents;
 - (b) An inspection schedule;
 - (c) Methods for documenting the date and results of each inspection and any repairs that were made;
 - (d) The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
 - (i) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (ii) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]
- (22) Cleaning and Washoff Solvent Accounting System: In accordance with §5-253.16(d)(4) of the *Regulations*, the Permittee shall develop and use an organic solvent accounting form to record:
- a) The quantity and type of organic solvent used each month for washoff and cleaning;
 - b) The number of pieces washed off, and the reason for the washoff; and
 - c) The quantity of spent organic solvent generated
- [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]
- (23) Chemical Composition of Cleaning and Washoff solvents: In accordance with §5-253.16(d)(5) of the *Regulations*, the Permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 to Subpart JJ of Title 40 of the *Code of Federal Regulations* (CFR) Part 63 in concentrations subject to MSDS reporting as required by OSHA. [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]
- (24) Spray Booth Cleaning: In accordance with §5-253.16(d)(6) of the *Regulations*, the Permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters. However, when the spray booth coating or other protective material used to cover the booth is being replaced, the owner or operator shall use no more than 1.0 gallon of organic solvent per booth to prepare the surface of the booth prior to applying the booth coating. [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]
- (25) Storage Requirements: In accordance with §5-253.16(d)(7) of the *Regulations*, the Permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials. [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]

- (26) Application Equipment Requirements: In accordance with §5-253.16(d)(8) of the *Regulations*, the Permittee shall not use conventional air spray guns to apply finishing materials, except as allowed by §5-253.16(d)(8) of the *Regulations*. [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]
- (27) Line Cleaning: In accordance with §5-253.16(d)(9) of the *Regulations*, the Permittee shall pump or drain all organic solvent used for line cleaning into a normally closed container. [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]
- (28) Gun Cleaning: In accordance with §5-253.16(d)(10) of the *Regulations*, the Permittee shall collect all organic solvent used to clean spray guns into a normally closed container. [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]
- (29) Wash-off Operations: In accordance with §5-253.16(d)(11) of the *Regulations*, the Permittee shall control emissions from wash-off operations by:
- (a) If wash-off tanks are designed with covers, keep covered when not in use; and
 - (b) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- [10 V.S.A. §§556(c) and 556a(d)] [§5-253.16 of the *Regulations*]
- (30) The Permittee shall continue to explore, and implement where feasible, reformulation of coatings to reduce all HAC emissions which are in excess of their respective Action Level with the emphasis on minimizing those HACs with the lowest respective Action Levels (i.e. higher toxicity). The Permittee shall also continue the use of high solids “hot spray” coating technologies where feasible including application of topcoats and sealers. The Permittee is reducing emissions at the Facility by using a UV coating process at Permittee’s Beecher Falls, Vermont facility, where such process results in negligible emission, thereby obviating the need to conduct such finishing operations at the Facility. The Permittee shall demonstrate compliance with this condition by submitting to the Agency annually as part of its Annual Compliance Certification (1) a listing of coating HAC emissions in excess of their respective Action Level and the respective emission in pounds per year for the current year and two years prior, (2) a discussion of any measures implemented, including coating reformulations, in the current year and its effect on those HACs in excess of their respective Action Level, (3) a statement affirming continued use where feasible of the hot spray and UV roll-coating measures, or their equivalent. [10 V.S.A. §§556(c) and 556a(d)] [§§5-261(2) and 5-1015(a)(1) of the *Regulations*]

- Emission Limitations -

- (31) Particulate Matter [Boilers]: Emissions of air contaminants from the three wood fired boilers shall not exceed the following limits:

Particulate Matter Emission Limitations		
Boiler	Emission Limitations	
	gr/dscf or lbs/MMBTU ¹	lbs/hour ²
Wickes Boiler with a multicyclone, no reinjection	0.20 gr/dscf	20.17
Riley #233 Boiler with a multicyclone, no reinjection	0.20 gr/dscf	24.41
Riley #234 Boiler with a multicyclone, no reinjection	0.20 gr/dscf	24.41
Bryan Boiler	0.5 lbs/MMBTU	1.35

¹ gr/dscf equals grains of pollutant emitted per dry standard cubic foot of undiluted exhaust gas corrected to 12% carbon dioxide and lbs/MMBTU equals pounds of pollutant emitted per million British Thermal Units of heat input.

² lbs/hour equals pounds of pollutant emitted per hour based on the MMBTU/hr rating of the unit as given in Findings of Fact A.

Any emission testing conducted to demonstrate compliance with the above emission limits shall be performed in accordance with the U.S. EPA Reference Methods 5 found in 40 CFR Part 60, Appendix A, or an alternative method which has been published in 40 CFR, provided the federally approved alternative method has been accepted in writing by the Agency before testing. [10 V.S.A. §556a(d)] [§§5-231, 5-261, and 5-404 of the Regulations] [Application for #AP-1987-07-03]

- (32) Particulate Matter [Wood Waste Dust Collection Systems]: Emissions of particulate matter (PM) from the fabric filters used in the wood waste dust collection systems shall not exceed the following limits:

Particulate Matter Emission Limitations		
Unit	Emission Limitations	
	Gr/dscf ¹	lbs/hour ²
Unit E Rough Mill: Carter Day #999, Model 232 RF10	0.06	15.4
Unit Da: American Von Tongeren (AVT), Model 100S	0.06	3.1
Unit Db: American Von Tongeren (AVT), Model 100S	0.06	3.1
Unit #1 Finish Mill/Sanding: MAC #1403, Model 144MCF494	0.020	9.3

Particulate Matter Emission Limitations		
Unit	Emission Limitations	
	Gr/dscf ¹	lbs/hour ²
Unit #2 Finish Mill/Sanding: MAC #1404, Model 144MCF494	0.020	9.3
Unit #3 Finish Mill/Sanding: MAC #1405, Model 144MCF494	0.020	10.3
Unit #4 Rough Mill: MAC 1442, Model 144MCF361	0.010	4.3
Unit #5 Finish Mill: MAC 1440, Model 144MCF494	0.010	4.3

¹ gr/dscf equals grains of pollutant emitted per dry standard cubic foot of undiluted exhaust gas.

² lbs/hour equals pounds of pollutant emitted per hour based on ACFM from Findings of Fact A.

Any emission testing conducted to demonstrate compliance with the above emission limit shall be performed in accordance with 40 *CFR* Part 60, Appendix A, Reference Method 5 or an alternative method which has been published in 40 *CFR*, provided the federally approved alternative method has been accepted in writing by the Agency before testing. [10 V.S.A. §§556(c) and 556a(d)] [§§5-231 and 5-404 of the *Regulations*]

- (33) Visible Emissions [Facility Wide]: Emissions of visible air contaminants from any installation at the Facility, constructed prior to April 30, 1970, including Riley Boiler #234, shall not exceed forty (40) percent opacity for more than a period, or periods aggregating six (6) minutes in any hour and at no time shall visible emissions exceed sixty (60) percent opacity except where otherwise noted in this Permit. Emissions of visible air contaminants from any installation at the Facility, constructed subsequent to April 30, 1970 including the Wickes boiler and Riley Boiler #233, shall not exceed twenty (20) percent opacity for more than a period, or periods, aggregating six (6) minutes in any hour and at no time shall visible emissions exceed sixty (60) percent opacity.

Any emission testing conducted to demonstrate compliance with the above emission limits shall be performed in accordance with 40 *CFR* Part 51, Appendix M, Methods 203B and 203C, respectively, or equivalent methods approved in writing by the Agency. [§§5-211(2), 5-211(3) and 5-404 of the *Regulations*]

- (34) Fugitive Emissions: The Permittee shall take reasonable precautions at all times to control and minimize emissions of fugitive particulate matter from the operations at the Facility. This shall include but not be limited to the following:
- (a) Taking precautions to prevent fugitive particulate matter (i.e. wood dust) during the handling and disposal of the wood waste material collected from the wood processing operations. Any drop loading of wood waste material from a silo, storage bin or similar unit into a receiving vehicle or trailer for subsequent removal shall be done in an area enclosed on at least three sides in order to prevent wind currents from re-entraining the material or its equivalent. The Agency may require additional dust control measures to ensure compliance, such as requiring an enclosed chute or stocking be used to limit the drop distance, based on Agency inspections of the actual operations; and
 - (b) The use of wet suppression, calcium chloride applications or other dust control measures as necessary to minimize fugitive dust from all unpaved roads and traffic areas at the Facility;

[10 V.S.A. §§556(c) and 556a(d)] [§5-231(4) of the *Regulations*]

- (35) Hazardous Air Pollutants: Emission of federally regulated hazardous air pollutants (HAPs) from the Facility shall not equal or exceed ten (10) tons per year of any single HAP or twenty-five (25) tons per year of all HAPs combined per year based on any rolling twelve (12) consecutive calendar month period. [40 CFR Part 63] [§5-1015(a)(1) of the *Regulations*][AOP-04-005]
- (36) Hazardous Air Contaminants: Emissions of state hazardous air contaminants (HACs) from the applicable operations at the Facility shall not equal or exceed their respective Action Level (found in Appendix C of the *Regulations*) unless the Agency has reviewed and approved such HAC emission under §5-261 of the *Regulations*. [§5-261 of the *Regulations*]

- (37) Hazardous Air Contaminants: Emissions of the following hazardous air contaminants shall not exceed the following limits:

Hazardous Air Contaminant Emission Limitations		
Hazardous Air Contaminant	CAS #	Emission Limitation lbs/year ¹
ISOBUTYL ESTER ISOBUTYRIC ACID	97-85-8	3,400
ACETONE	67-64-1	92,000
ETHYL ALCOHOL	64-17-5	69,000
BUTYL PROPASOL	5131-66-8	2,700
ISOBUTYL ACETATE	110-19-0	32,000
ISOBUTYL ALCOHOL	78-83-1	19,000
METHYL AMYL KETONE (2-heptanone)	110-43-0	51,000
N-BUTYL ACETATE	123-86-4	81,000
TITANIUM DIOXIDE	13463-67-7	300
SILICA, CRYSTALLINE	14808-60-7	30
FORMALDEHYDE ²	50-00-0	7.1

¹ lbs/year equals pounds of pollutant emitted per rolling twelve (12) consecutive calendar month period.

² lbs/year equals pounds of pollutant emitted per rolling twelve (12) consecutive calendar month period. Limits based on Vermont Air Pollution Control Regulations, December 2018 APPENDIX C HAZARDOUS AMBIENT AIR STANDARDS CATEGORY.

[10 V.S.A. §§556(c) and 556a(d)] [§5-261(2) of the *Regulations*]

- (38) Nuisance and Odor: The Permittee shall not discharge, cause, suffer, allow, or permit from any source whatsoever such quantities of air contaminants or other material which will cause injury, detriment, nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort, repose, health or safety of any such persons or the public or which causes or has a natural tendency to cause injury or damage to business or property. The Permittee shall not discharge, cause, suffer, allow, or permit any emissions of objectionable odors beyond the property line of the premises. [§5-241(1) and (2) of the *Regulations*]

**- Emission Limitations –
[from Wood Furniture Manufacturing Rule]**

- (39) The Permittee shall limit VOC emissions from wood furniture manufacturing operations by:
- (a) Using only topcoats containing no more than 1.8 lbs VOC/lb solids, as applied, and sealers containing no more than 1.9 lbs VOC/lb solids, as applied, or the equivalent;
 - (b) Using acid-cured alkyd amino vinyl sealers containing no more than 2.3 lbs VOC/lb solids, as applied, and acid-cured alkyd amino conversion varnish topcoats containing no more than 2.0 lbs VOC/lb solids, as applied, or the equivalent; and
 - (c) Using only strippable spray booth coatings containing no more than 0.8 lbs VOC/lb solids, as applied.

[§5-253.16(c)(1) of the *Regulations*]

- (40) The Permittee shall limit VHAP emissions from wood furniture manufacturing operations by:
- (a) Using only stains, wash-coats, sealers, topcoats, basecoats and enamels with VHAP contents of no more than 1.0 lbs VHAP/lb solids, as applied; thinners for stains, sealers and topcoats that contain no more than 10% VHAP by weight; and thinners for wash-coats, basecoats and enamels that contain no more than 3% VHAP by weight; or the equivalent;
 - (b) Limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives based on the following criteria:
 - (i) For foam adhesives used in products required to meet flammability requirements, the VHAP content of the adhesive shall not exceed 1.8 lb VHAP/lb solids, as applied; or
 - (ii) For all other contact adhesives, the VHAP content of the adhesive shall not exceed 1.0 lb VHAP/lb solids, as applied, or the equivalent.

[§5-253.16(c)(2) of the *Regulations*]

- Compliance Testing and Monitoring -

- (41) The Permittee shall perform periodic emission testing on the Wickes Boiler and the two (2) Riley Boilers for NO_x, PM, and Combustion Efficiency while burning wood. For each emission test, the Permittee shall furnish the Agency with a written report of the results within thirty (30) days after the completion of the testing. The conditions of this section of the permit are not to be considered continuous air monitoring requirements. The initial emission testing has been performed during calendar year 2016; emission testing shall be conducted at a minimum once every five years. The emission testing shall be performed in order to demonstrate compliance with the emission limitations specified within the conditions of this Permit. At least thirty (30) days prior to performing the emission testing required above, the Permittee shall submit to the Agency a pretest report prepared in accordance with the Agency's "Source Emission Testing Guidelines". [§§5-402(1), 5-404(1), 5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]

- (42) Boiler O&M: The Permittee shall continue to implement an operation and maintenance plan for the Wickes Boiler and the two (2) Riley Boilers. The purpose of said plan shall be to ensure that the boilers remain in continuous compliance with the applicable requirements contained in this Permit. The O&M plan shall include, but not be limited to:
- (a) Methods for determining the combustion efficiency trigger level for each affected wood fired boiler. The trigger level shall be based on a minimum of twelve (12) combustion efficiency tests performed during operating conditions representative of the typical operating range of the respective boiler. Two trigger levels may be established by the Permittee to represent winter and summer conditions. The trigger level may be established by the Permittee using hand held instrumentation or other methods acceptable to the agency;
 - (b) The procedures to be followed to increase combustion efficiency whenever the combustion efficiency is determined to be less than the trigger level. The procedures may be in the format of a troubleshooting guide for operators;
 - (c) Descriptions of routine maintenance and inspection procedures;
 - (d) Provisions for maintaining records of maintenance and inspection procedures, including both routine activities and actions taken in response to observations of low combustion efficiency; and
 - (e) Provisions for calibration and maintenance of any testing instruments and/or equipment used to measure the concentrations of CO₂ and CO in the boiler exhaust gases. Oxygen sensors or other methods for testing may be used if acceptable to the Agency and if considered to be appropriate and adequate methods for use in the wood burning combustion systems.

Although not considered continuous air monitoring, failure to take reasonable steps, in accordance with said plan, to increase the combustion efficiency, once it has fallen below the trigger level, shall be considered credible evidence of possible exceedance of the opacity and particulate emission limits set forth in this Permit. Said O&M plan shall be present at the Facility at all times and shall be made available to representatives of the Agency upon request. The Permittee shall revise this plan at the Agency's request or on its own request based on operating experience, or to reflect equipment or operational changes. All O&M Plan modifications are subject to Agency review and shall not be implemented until the Permittee has received written approval from the Agency. [10 V.S.A. §§556(c) and 556a(d)] [§§5-405(1) and 5-1015(a)(4) of the *Regulations*]

- (43) **Boiler Combustion Efficiency:** The Permittee shall perform periodic combustion efficiency testing of the Wickes Boiler and the two (2) Riley Boilers by measuring the concentrations of carbon dioxide ("CO₂") and carbon monoxide ("CO") in the exhaust gases or other Agency approved parameters. Said testing shall be performed at least once every two months. The Permittee shall perform said testing of the CO₂ and CO concentrations, or other Agency approved parameters, using methods which have been approved in writing in advance by the Agency. The CO₂ and CO concentrations may be on a wet or dry basis as long as they are both on the same basis. Any instruments and/or equipment used for said testing shall be calibrated and maintained in accordance with the manufacturer's recommendations. Each time testing of the boiler exhaust gas is conducted to determine the concentrations of CO₂ and CO, the Permittee shall calculate and record the combustion efficiency of the boiler using methods approved in writing in advance by the Agency. For the purposes of this Permit, combustion efficiency shall be determined using the following equation, unless an alternative method is approved by the Agency:

$$CE(\%) = \frac{CO_2}{CO_2 + CO} \times 100$$

Where;

CE = Combustion efficiency,

CO₂ = % by volume of carbon dioxide in the flue gas, and

CO = % by volume of carbon monoxide in the flue gas.

[§§5-404(1), 5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]

- (44) **General O&M [Wood Waste Dust Collection System Fabric Filters]:** The Permittee shall continue to implement an operation and maintenance plan for the wood waste dust collection system fabric filters. The purpose of said plan shall be to ensure that the fabric filters remain in continuous compliance with the conditions of this Permit. The operation and maintenance plan shall include, but not be limited to, a description of routine maintenance and inspection procedures, provisions for maintaining records of such maintenance and inspections as well as findings of those inspections and any corrective actions which were taken. Said operation and maintenance plan shall be present at the facility at all times and shall be made available to representatives of the Agency upon request. The Permittee shall revise this plan at the Agency's request or on its own request to reflect equipment or operational changes. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*]

Record Keeping and Reporting -

- (45) **Records of Fuel Use:** The Permittee shall maintain records of the total quantity of wet/green wood, dry wood and fuel oil consumed in the combined boilers each month. The quantity of wet/green wood and dry wood shall be recorded separately and in units of tons as fired including the weight of moisture. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*]

- (46) Records of Fuel Use: The Permittee shall maintain records of the total quantity of No.2 fuel oil (monthly basis) in units of gallons. At the beginning of each month, the Permittee shall calculate the total quantity of each fuel consumed in the boilers during the previous twelve (12) consecutive month period. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*] 40 CFR Part 60 Subpart Dc
- (47) Records of NOx Emissions: Based on the above fuel usage records and the equation contained in Condition (7) of this Permit, the Permittee shall calculate and record at the beginning of each month the quantity of NOx emitted from the Facility boilers for the previous twelve (12) consecutive calendar month period. [10 V.S.A. §§556(c) and 556a(d)] [§§5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]
- (48) Records of HAC Emissions: The Permittee shall calculate and record at the beginning of each month the quantity of each hazardous air contaminant identified in Condition (37) of this Permit emitted from the Facility finishing operations for the previous twelve (12) consecutive calendar month period. [10 V.S.A. §§556(c) and 556a(d)] [§§5-261, 5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]
- (49) Records of Combustion Efficiency Testing: The Permittee shall maintain records of the results of the combustion efficiency testing conducted on the respective boilers. These records shall at least include the test date, identification of boiler tested, a measurement of the load on the boiler (such as fuel feed rate or steam production rate), the concentrations of oxygen, carbon monoxide and carbon dioxide in the exhaust gas as well as the calculated combustion efficiency. [10 V.S.A. §§556(c) and 556a(d)] [§§5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]
- (50) Notification: As required by 40 CFR Part 63 §63.9(j), the Permittee must notify the U.S. EPA within fifteen (15) days regarding any changes in information previously provided to the U.S. EPA under 40 CFR Part 63. Upon issuance of this permit the Permittee is no longer subject to 40 CFR Part 63 Subpart JJ. Within 15 days of the issuance of this permit, the Permittee must notify the U.S. EPA that it is no longer subject to Subpart JJ. [10 V.S.A. §§556(c) and 556a(d)] [§§5-402 of the *Regulations*] 40 CFR Part 63 Subpart A §63.9]
- (51) Records of Finishing Material Usage: In accordance with §5-253.16(f) of the *Regulations*, the Permittee shall maintain records of the following:
- (a) A certified product data sheet for each coating, finishing material, thinner, contact adhesive, and strippable spray booth coating used at the source;
 - (b) The VHAP content in lb VHAP/lb solids, as applied, of each finishing material, thinner, and contact adhesive used at the source;
 - (c) The formaldehyde content, in lb/gal, as applied, of each finishing material and contact adhesive subject to the emission limits in Condition (37).
 - (d) The VOC content in lb VOC/lb solids, as applied, of each topcoat, sealer, and strippable spray booth coating used at the source;
 - (e) The quantity of each finishing material, thinner, contact adhesive, and strippable spray booth coating used at the source each month; and

- (f) For stationary sources demonstrating compliance with the emission limitations of §5-253.16 of the *Regulations* through monthly averaging, the averaging calculation completed in accordance with the following equation, as applicable, for each month.

$$E_{HAPorVOC} = \frac{\sum_{i=1}^n M_i C_i}{\sum_{i=1}^n M_i}$$

Where:

- $E_{HAPorVOC}$ = the average HAP or VOC content of the finishing material, in lbs HAP or VOC/lb solids;
- C = the HAP or VOC content of a particular finishing material, in lbs HAP or VOC/lb solids, as applied;
- M = the mass of solids, in pounds, in a particular finishing material used during the monthly averaging period.

[10 V.S.A. §§556(c) and 556a(d)] [§§5-253.16(f), 5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]

- (52) Records of Work Practice Implementation Plan Requirements: In accordance with §5-253.16(f) of the *Regulations*, the Permittee shall maintain records of the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
- (a) Records demonstrating that the operator training program is in place;
 - (b) Records collected in accordance with the inspection and maintenance plan;
 - (c) Records associated with the cleaning solvent accounting system; and
 - (e) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

[10 V.S.A. §§556(c) and 556a(d)] [§§5-253.16(f), 5-405(1) and 5-1015(a)(3) and (4) of the *Regulations*]

- (53) Records of Precatalyzed Coatings: The Permittee shall maintain records of the monthly usage of pre-catalyzed sealer and pre-catalyzed lacquer at the Facility, in units of gallons. At the beginning of each month, the Permittee shall calculate the total quantity of pre-catalyzed coatings used at the Facility, in units of gallons, during the previous twelve (12) consecutive month period. [10 V.S.A. §§556(c) and 556a(d)] [§5-405(1) of the *Regulations*]

- (54) Records of all required compliance testing, including combustion efficiency testing, shall include the following:
- (a) date, place, and time of sampling or measurements;
 - (b) date analyses were performed;
 - (c) company or entity that performed the analyses;
 - (d) analytical techniques or methods used;
 - (e) results of all such analyses; and

- (f) operating conditions existing at the time of sampling or measurement. [§§5-402(1), 5-405(1) and 5-1015(a)(5) of the *Regulations*]
- (55) All records shall be retained for a minimum period of five (5) years from the date of record and shall be made available to the Agency upon request. [§§5-402, 5-405(1) and 5-1015(a)(7) of the *Regulations*]
- (56) Semi-Annual Periodic Monitoring Reports: Within thirty (30) days after July 1 and January 1 of each year, the Permittee shall submit to the Agency a report, signed by a responsible official of the Facility, containing the following information regarding the preceding six (6) months:
- (a) A summary of the fuel usage records required by this Permit. Such records shall also be sent to the U.S. EPA at the address noted in Condition (57);
 - (b) A summary of the NOx emission calculations as required by this Permit;
 - (c) A summary of the periodic combustion efficiency calculations required by this Permit;
 - (d) For stationary sources demonstrating compliance with the emission limitations of §5-253.16 of the *Regulations* through the use of compliant coatings, a statement that compliant coatings and thinners have been used each day in the semiannual reporting period;
 - (e) For stationary sources demonstrating compliance with the emission limitations of §5-253.16 of the *Regulations* through monthly averaging, the averaging calculations completed in accordance with §5-253.16, as applicable, for each month within the semiannual reporting period and a statement that the source is in compliance with the respective standard;
 - (f) For stationary sources demonstrating compliance with §5-253.16 of the *Regulations* through the use of compliant contact adhesives, a statement that compliant contact adhesives have been used each day in the semiannual reporting period;
 - (g) A statement that compliant strippable spray booth coatings have been used each day in the semiannual reporting period;
 - (h) A statement that the work practice implementation plan is being followed; and
 - (i) If the stationary source was in violation of any provision §5-253.16 of the *Regulations*, the measures taken to bring the source into compliance.
- [§§5-402(1), 5-405(1) and 5-1015(a)(5) of the *Regulations*] [40 CFR Part 60 Subpart Dc §§60.48c(d),(e), and (j)]
- (57) Annual Compliance Certification: By February 1st of each year, the Permittee shall submit an annual certification of compliance for the previous calendar year, concurrent with the annual registration data submitted to the Agency, which ascertains and identifies the compliance status of the Facility with respect to all terms and conditions of this Permit, including but not limited to the following:
- (a) Identification of each term or condition of the permit that is the basis of the certification;
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent; and

- (d) The methods used for determining the compliance status of the Facility over the reporting period.
- (e) Emissions of each regulated state HAC

A copy of the compliance certification shall also be sent to the U.S. Environmental Protection Agency at the following address:

Air Compliance Clerk
 U.S. EPA-New England
 5 Post Office Sq. Suite 100 (OES04-2)
 Boston, MA 02109-3912

[§114(a)(3) of the CAA] [§§5-402(1) and 5-1015(a)(11) of the *Regulations*]

- (58) The Permittee shall notify the Agency in writing within ten (10) days of any violation, of which it is aware, of any requirements of this Permit. This notification shall include, at a minimum, the cause for the violation and corrective action or preventative maintenance taken to correct the violation. [§§5-402(1) and 5-1015(a)(6) of the *Regulations*]
- (59) The Permittee shall notify the Agency in writing of any significant proposed physical or operational change at the Facility which may increase the emission rate of any air contaminant to the ambient air regardless of any concurrent emission reductions that may be achieved. If the Agency determines that a permit amendment is required, a new application and the appropriate application fee shall be submitted. The permit amendment shall be obtained prior to commencing any such change except as may otherwise may be allowed by the *Regulations*. [10 V.S.A. §556(c)] [§§5-402 and 5-501 of the *Regulations*]
- (60) Annual Registration: The Permittee shall calculate the quantity of emissions of air contaminants from the Facility annually. If the Facility emits more than five (5) tons of any and all air contaminants per year, the Permittee shall register the source with the Secretary of the Agency (hereinafter "Secretary"), and shall renew such registration annually. Each day of operating a source which is subject to registration without a valid, current registration shall constitute a separate violation and subject the Permittee to civil penalties. The registration process shall follow the procedures set forth in Subchapter VIII of the *Regulations*, including the payment of the annual registration fee on or before May 15 of each year. [Subchapter VIII §§5-802, 5-803, 5-807, 5-808 of the *Regulations*]
- (61) Reporting requirements for **40 CFR Part 63 Subpart JJJJJ**

Reporting Requirements Summary Table			
Subsection	Description	Due Date	Completion Date
§63.11225(a)(2)	Initial Notification	January 20, 2014	Sept. 13, 2011
§63.11225(a)(4) a	Notification of initial boiler tune up	August 21, 2014	June 26, 2014
§63.11225(a)(4) b	Notification of completion of the energy assessment	July 19, 2014	June 26, 2014
§63.11225(b)	Biennial Compliance Certification	March1 (Biennial)	Ongoing
§63.11223	Biennial tune-ups	Biennial	Ongoing

- (62) All records, reports, and notifications that are required to be submitted to the Agency by this Permit shall be submitted to:

Air Quality & Climate Division
Department of Environmental Conservation
Agency of Natural Resources
Davis 4
One National Life Drive,
Montpelier, Vermont 05620-3802

[§5-402 of the *Regulations*]

- Stratospheric Ozone Protection -

- (63) Protection of Stratospheric Ozone - Recycling and Emissions Reduction. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 *CFR* Part 82, Subpart F:
- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 *CFR* Part 82, Subpart F §82.156.
 - (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment as specified in 40 *CFR* Part 82, Subpart F §82.158.
 - (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program as specified in 40 *CFR* Part 82, Subpart F §82.161.
 - (d) Commercial or industrial process refrigeration equipment must comply with the leak repair requirements specified in 40 *CFR* Part 82, Subpart F §82.156.
 - (e) For each appliance normally containing fifty (50) or more pounds of refrigerant, the Permittee shall keep records of refrigerant purchased and added to such appliances as specified in 40 *CFR* Part 82, Subpart F §82.166.

[10 V.S.A. §§556(c) and 556a(d)] [40 *CFR* Part 82, Subpart F]

- Standard Permit Conditions -

- (64) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Agency which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [10 V.S.A. §§556(c) and (g) and 556a(d)] [40 *CFR* Part 60.11(d) and 63.6(e)]

- (65) These Permit conditions may be suspended, terminated, modified, or revoked for cause and reissued upon the filing of a written request with the Secretary of the Agency (hereinafter "Secretary") or upon the Secretary's own motion. Any modification shall be granted only with the written approval of the Secretary. If the Secretary finds that modification is appropriate, only the conditions subject to modification shall be re-opened. The filing of a request for modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay any terms or conditions of this Permit. The Secretary may provide opportunity for public comment on any proposed modification of these conditions. If public comments are solicited, the Secretary shall follow the procedures set forth in 10 V.S.A. §556 and §556a, as amended. [10 V.S.A. §§556(d) and 556a(g)] [§§5-1008(a) and 5-1008(e) of the *Regulations*]
- (66) Cause for reopening, modification, termination and revocation of this Permit includes, but is not limited to:
- (a) Inclusion of additional applicable requirements pursuant to state or federal law;
 - (b) A determination that the permit contains a material mistake or that inaccurate information was used to establish emissions standards or other terms or conditions of the operating permit;
 - (c) A determination that the operating permit must be modified or revoked to ensure compliance with applicable requirements;
 - (d) A determination that the subject source has failed to comply with a permit condition;
 - (e) For Title V subject sources, a determination by U.S. EPA that cause exists to terminate, modify, revoke or reissue an operating permit;
 - (f) Those causes which are stated as grounds for refusal to issue, renew or modify an operating permit under §5-1008(a) of the *Regulations*; or
 - (g) If more than three (3) years remain in the permit term and the source becomes subject to a new applicable requirement.
- [10 V.S.A. §§556(c) and 556a(d)] [§5-1008(e)(4) of the *Regulations*]
- (67) The Permittee shall furnish to the Agency, within a reasonable time, any information that the Agency may request in writing to determine whether cause exists to modify, revoke, reissue, or terminate the Permit or to determine compliance with this Permit. Upon request, the Permittee shall also furnish to the Agency copies of records required to be kept by this Permit. [10 V.S.A. §§556(c) and 556a(d)] [§5-402 of the *Regulations*] [40 CFR Part 70 §70.6(a)(6)(v)]
- (68) By acceptance of this Permit, the Permittee agrees to allow representatives of the State of Vermont access to the properties covered by the Permit, at reasonable times, to ascertain compliance with Vermont environmental and health statutes and regulations and with this Permit. The Permittee also agrees to give the Agency access to review and copy any records required to be maintained by this Permit, and to sample or monitor at reasonable times to ascertain compliance with this Permit. [10 V.S.A. §§556(c), 556a(d) and 557] [§§5-402, 5-404, and 5-1015(a)(10) of the *Regulations*]

- (69) All data, plans, specifications, analyses and other information submitted or caused to be submitted to the Agency as part of the application for this Permit or an amendment to this Permit shall be complete and truthful and, for Title V permit applications, certified by a responsible official whose designation has been approved by the Secretary. Any such submission which is false or misleading shall be sufficient grounds for denial or revocation of this Permit, and may result in a fine and/or imprisonment under the authority of Vermont statutes. [10 V.S.A. §§556(c) and 556a(d)] [§§5-409 and 5-1006(f) of the *Regulations*]
- (70) For the purpose of establishing whether or not a person has violated or is in violation of any condition of this Permit, nothing in this Permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [10 V.S.A. §§556(c) and 556a(d)]
- (71) Any permit noncompliance could constitute a violation of the federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [10 V.S.A. §§556(c) and 556a(d)] [§§5-1008(a) and 5-1008(e) of the *Regulations*]
- (72) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this Permit. [10 V.S.A. §§556(c) and 556a(d)]
- (73) No person shall build, erect, install or use any article, machine, equipment or other contrivances, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which otherwise would constitute a violation of these *Regulations*. [10 V.S.A. §§556(c) and 556a(d)] [§5-403 of the *Regulations*]
- (74) The provisions of this Permit are severable. If any provision of this Permit, or its application to any person or circumstances is held invalid, illegal, or unenforceable by a court of competent jurisdiction, the invalidity shall not apply to any other portion of this Permit which can be given effect without the invalid provision or application thereof. [10 V.S.A. §§556(c) and 556a(d)]
- (75) This Permit does not convey any property rights of any sort or any exclusive privilege, nor does it authorize any injury to private property or any invasion of personal rights. [10 V.S.A. §§556(c) and 556a(d)]
- (76) All subsequent owners and/or operators of this Facility must request an amendment and transfer of this Permit prior to commencing any operations covered by this Permit. All subsequent owners and/or operators shall submit to the Agency as part of the request for amendment all such information the Agency deems necessary to establish legal ownership and/or interest in the property and all such information the Agency deems necessary to ensure the new owners and/or operators will construct and operate the Facility in compliance with the *Regulations* and this Permit. The terms and conditions of this Permit shall remain in full force and effect after submittal of the request for amendment and until the issuance of an amended Permit or denial. Should the Secretary deny the request, the new owner and/or operator must take whatever action is necessary to comply with the denial. [10 V.S.A. §§556 and 556a] [§§5-501, 5-1004, and 5-1013(a) of the *Regulations*]

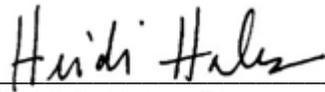
- (77) Renewable Energy Projects – Right to Appeal to Public Service Board. If this decision relates to a renewable energy plant for which a certificate of public good is required under 30 V.S.A. §248, any appeal of this decision must be filed with the Vermont Public Service Board pursuant to 10 V.S.A. §8506. This section does not apply to a facility that is subject to 10 V.S.A. §1004 (dams before the Federal Energy Regulatory Commission), 10 V.S.A. §1006 (certification of hydroelectric projects) or 10 V.S.A. Chapter 43 (dams). Any appeal under this section must be filed with the Clerk of the Public Service Board within 30 days of the date of this decision; the appellant must file with the Clerk an original and six copies of its appeal. The appellant shall provide notice of the filing of an appeal in accordance with 10 V.S.A. 8504(c)(2), and shall also serve a copy of the Notice of Appeal on the Vermont Department of Public Service. For further information, see the Rules and General Orders of the Public Service Board, available on line at www.psb.vermont.gov. The address for the Public Service Board is 112 State Street, Montpelier, Vermont, 05620-2701 (Tel. # 802-828-2358). [10 V.S.A. §§556(c) and 556a(d)]
- (78) All Other Projects – Right to Appeal to Environmental Court. Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Court within 30 days of the date of the decision. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at www.vermontjudiciary.org. The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660). [10 V.S.A. §§556(c) and 556a(d)]
- (79) Conditions 1, 2, 3, 4, 7, 8, 9, 10, 12, 32, 37, 43, and 63 are derived from the new source review requirements of Subchapter V of the *Regulations*. With the exception of the cited new source review conditions, this Operating Permit shall expire as indicated on the cover page to this Permit. The Permittee shall submit to the Agency a complete application for renewal of the Operating Permit at least six (6) months before the expiration of the Operating Permit. If a timely and administratively complete application for an operating permit renewal is submitted to the Secretary, but the Secretary has failed to issue or deny such renewal before the end of the term of this Operating Permit, then the Permittee may continue to operate the subject source and all terms and conditions of this Operating Permit shall remain in effect until the Secretary has issued or denied the operating permit renewal. However, this Operating Permit shall automatically expire if, subsequent to the renewal application being determined or deemed administratively complete pursuant to §5-1006 of the *Regulations*, the Permittee fails to submit any additional information required by the Secretary as well as information pertaining to changes to the Facility within thirty (30) days or such other period as specified in writing by the Secretary. [10 V.S.A. §§556(c) and 556a(d)] [§§5-1011 and 5-1012(a) of the *Regulations*] [§§5-1005(c) and 5-1012 of the *Regulations*]

- (80) The conditions of this Permit as set forth above supersede all conditions contained in all prior Permits issued by the Agency to the Permittee for this Facility. [10 V.S.A. §§556(c) and 556a(d)]

The Agency's issuance of this Air Pollution Control Permit relies upon the data, judgment, and other information supplied by the Permittee. The Agency makes no assurances that the air contaminant source approved herein will meet performance objectives or vendor guarantees supplied to the source Permittee. It is the sole responsibility of the Permittee to operate the source in accordance with the conditions herein and with all applicable state and federal standards and regulations.

Permit issued and effective this 23rd day of March, 2021.

Permit issuance authorized by:
Agency of Natural Resources
Peter Walke, Commissioner
Department of Environmental Conservation

By: 
Heidi C. Hales, Director
Air Quality & Climate Division